## DEPARTMENT OF ORGANISMIC AND EVOLUTIONARY BIOLOGY HARVARD UNIVERSITY



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## Dear Josh:

Many thanks for your letter. Your recollection that you did not practice selection for crossing ability makes the "Lederberg-lab" hypothesis quite shaky. Your reference to the years 1922-1945 when the K-12 strain was being stored and subcultured reminded me of some recent work on long-term stab cultures of E. coli. For reasons still not understood, these conditions induce IS element transposition, in some cases very dramatically. So it seems to me that you are probably right. A combination of storage and subculturing would favor a mutation that was derepressed for transfer, and the most likely type of mutation might very well be an IS insertion.

Thanks again for your help. I'm glad you enjoyed my speculative binge. I found it rather fun.

Best regards,

Daniel L. Hartl Professor of Biology